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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,095	03/29/2001	Juan G. Revilla	10559-395001 / P10620-ADI	8397

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EXAMINER

DANG, KHANH NMN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/823,095

Applicant(s)

REVILLA ET AL.

Examiner

Khanh Dang

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

*us*  
Claims <sup>1, 2, 4-11, 13, 15-18, 20</sup> ~~1, 2, 4-11, 13, 15-18, 20~~ are rejected under 35 U.S.C. 102(b) as being

anticipated by Garibay, Jr. et al.

At the outset, it is noted that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, these claims do not define any structure/step that differs from Garibay, Jr. et al. It is first noted that the phrase, "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. In any event, With regard to claims 10, 11, 15, 16, and 17, Garibay, Jr. et al. discloses a processor coupled to the memory device (cache 14), wherein the processor includes an execution unit (12) and a control unit, the control unit including a prefetch unit (22/24) and exception handling logic (shown generally at 30), the control unit adapted to: fetch at least one data block; generate exception status information about the data block; store

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the exception status information and the data block in the prefetch unit (22/24); detect at least part of an instruction within the data block; in parallel, issue the instruction to the execution unit (12) and issue at least part of the exception status information to the exception handling logic. With regard to claim 13, the data/address buffers are readable as a so-called "instruction alignment unit." With regard to claim 14, the decoder 26 is readable as "decoder." With regard to claims 15 and 16, it is clear from Garibay, Jr. et al. that there must be a memory to store the prefetch buffers. With regard to claim 18, it is clear from Garibay, Jr. et al., the control unit is able to fetch another data block; generate additional exception status information about the another data block; and store the additional exception status information and the another data block in the prefetch unit (22/24). With regard to claims 1, 2, 4-9, one using the apparatus of Garibay, Jr. et al. would have performed the same steps set forth in claims 1, 2, and 4-9.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garibay, Jr. et al.

Garibay, Jr. et al., as explained above, discloses the claimed invention including the use of a exception handling processor/logic (30). Garibay, Jr. et al. does not disclose the use of an OR gate in the handling processor/logic. It would have been

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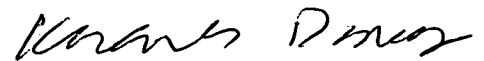
obvious to one of ordinary skill in the art at the time the invention was made to use an OR gate particularly in the handling processor/logic (30) of Garibay, Jr. et al., since the Examiner takes Official Notice that the use of an OR gate in a programmable handling processor/logic is old and well-known; and the only involves routine skill in the art. If the Applicants choose to challenge the fact that OR gate is used in programmable logic, supportive document(s) will be provided upon request.

Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garibay, Jr. et al.

Garibay, Jr. et al., as explained above, discloses the claimed invention including the use of a buffer in a prefetch unit (22/24). However, Garibay, Jr. et al. does not particularly disclose the use of at least two buffers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use at least two buffers, since it has been held that duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. vs. Bemis Co.*, 193 USPQ 8. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use at least two buffers in Garibay, Jr. et al., since the Examiner takes Official Notice that the use a plurality of buffers or a single large buffer in order to speed-up/improve transaction speed is old and well-known; and the only involves routine skill in the art. If the Applicants choose to challenge the fact that the use a plurality of buffers or a single large buffer in order to speed up/improve transaction speed is old and well-known, supportive document(s) will be provided upon request.

U.S. Patent Nos. 5,537,559 to Kane et al., 5,297,263 to Ohsuka et al., 5,559,977 to Avnon et al., and 6,507,862 to Joy et al. are cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.

A handwritten signature in black ink, appearing to read "Khanh Dang", written in a cursive style.

**Khanh Dang**  
**Primary Examiner**